

WHAT IS CLAIMED IS:

1. An ac generator for a vehicle comprising:
 - a rotor;
 - a stator opposed to the rotor and having an output lead;
 - a rectifying device connecting to the output lead of the stator;
 - a regulator that controls output voltage;
 - a common connector including internal terminals that connect the regulator with an internal circuit of at least one of the rectifying device and the rotor; and
 - an individual connector connected to the common connector, the individual connector including external terminals that receive and transmit electric signals from and to an external circuit,wherein the common connector and the individual connector further include intermediate terminals contacting with each other and engaging portions engaging with each other, the engaging portions being formed of projections and recesses.
2. The ac generator according to claim 1, wherein the common connector is connectable with each of a plurality of individual connectors having different shapes.
3. The ac generator according to claim 2, wherein the plurality of individual connectors includes a first individual connector having the external terminals in an axial direction of the rotor and a second individual connector having the

external terminals in a radial direction of the rotor.

4. The ac generator according to claim 1, wherein the engaging portions of the common connector include a first engaging portion that is disposed to extend in an axial direction of the rotor and a second engaging portion that is disposed to extend in a radial direction of the rotor, and the engaging portion of the individual connector is disposed to extend in one of the axial direction and the radial direction.

5. The ac generator according to claim 1, wherein the engaging portion of the common connector forms the projections and the recess between the projections, and the engaging portion of the individual connector forms the projection, wherein the projection of the individual connector is located in the recess of the common connector.

6. The ac generator according to claim 1, wherein each of the intermediate terminals of the common connector and each of the intermediate terminals of the individual connector are opposed to and paired with each other.

7. The ac generator according to claim 6, wherein the intermediate terminals of one of the common connector and the individual connector are straight and the intermediate terminals of the opposite one of the common connector and the individual connector are bent.

8. The ac generator according to claim 1, wherein the intermediate terminals of the individual connector include a first group of intermediate terminals and a second group of intermediate terminals, the first group of intermediate terminals is disposed to make contact with the intermediate terminals of the common connector when the individual connector is connected to the common connector such that the external terminals extend in an axial direction of the rotor, and the second group of intermediate terminals is disposed to make contact with the intermediate terminals of the common connector when the individual connector is connected to the common connector such that the external terminal extend in a radial direction of the rotor, wherein the second group of intermediate terminals is removed when the individual connector is connected such that the external terminals extend in the axial direction, and the first intermediate terminals are removed when the individual connector is connected such that external terminal extend in the radial direction.

9. The ac generator according to claim 1, wherein the common connector includes plural groups of intermediate terminals, the individual connector is connectable with the common connector in different directions so that the intermediate terminals of the individual connector make contact with at least one group of intermediate terminals, and the remaining group of intermediate terminals of the individual connector are removed.

10. The ac generator according to claim 1, wherein the number of the intermediate terminals of the common connector is equal to or greater than that of the individual connector.

11. The ac generator according to claim 1, wherein the regulator is mounted on the individual connector.

12. The ac generator according to claim 1, wherein the engaging portions of the common connector includes a first engaging portion in a direction parallel to the intermediate terminals of the common connector and a second engaging portion in a direction perpendicular to the first engaging portion, and the engaging portion of the individual connector is disposed in a direction perpendicular to the external terminals, wherein the engaging portion of the individual connector engages with one of the first engaging portion and the second engaging portion of the common connector.

13. The ac generator according to claim 12, wherein the intermediate terminals of the individual connector are disposed to extend in one of a direction parallel to the external terminals and a direction perpendicular to the external terminals.

14. The ac generator according to claim 12, wherein the regulator is mounted on the individual connector in parallel to the external terminals.